

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

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Applicant's or agent's file reference PCT-03-002	FOR FURTHER see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. ACTION	
International application No. PCT/KR03/01167	International filing date (day/month/year) 14 JUNE 2003 (14.06.2003)	(Earliest) Priority Date (day/month/year) 15 JUNE 2002 (15.06.2002)
Applicant PARK, Sang-Kyu		

This International search report has been prepared by the International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of sheets.

☐ It is also accompanied by a copy of each of the document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawing to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR03/01167**A. CLASSIFICATION OF SUBJECT MATTER**

IPC7 G01N 31/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G01N 31/22, G01N 33/02, C08G 75/00, G01N 21/64, A61L 2/06, G01N 21/80, B32B 3/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korea Patent and Applications for Inventions since 1975

Korea Utility Models and Applications for Utility Models since 1975

Japanese Utility Models and application for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS, WPI, USPTO, PAJ, CAPLUS(STN), INSPECT*(pH<near/1>sensitive), acid, base, sulfonamide, dimethylacrylamide, polymer, food, pack**

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0044891 A1 (The Gov. of the U.S. of America, as represented by the secretary, Dept. of Health and Human services) 18 Apr 2002 -see pages 1-3 & claims	1, 3, 4
Y	US 6103865 A (Kwangju Institute of Science and Technology) 15 Aug 2000 -see the whole document	1, 3, 4
A	WO 01/64430 A1 (Lifelines Technology, Inc.) 7 Sep 2001 -see abstract, Fig 6 & page 18	2
A	US 5607644 A (Optical Sensors Incorporated) 4 Mar 1997 -see abstract & claims 11-23	1

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

27 OCTOBER 2003 (27.10.2003)

Date of mailing of the international search report

28 OCTOBER 2003 (28.10.2003)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR03/01167

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002/0044891 A1	18 Apr 2002	none	
US 6103865 A	15 Aug 2000	KR 2000012970	06 Mar 2000
WO 01/64430 A1	7 Sep 2001	AU 200143409 A5	12 Sep 2001
		CA 2401847 AA	07 Sep 2001
		EP 1268178 A1	02 Jan 2003
		CN 1427770 T	02 Jul 2003
		EP 1268178 A4	16 Apr 2003
		US 6544925 B4	08 Apr 2003
US 5607644 A	4 Mar 1997	none	